

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P249198

Luminaire Tested: **LD8B200D010 ER8B200827 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249198  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B200D010 ER8B200827 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 2700 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20451.0 lumens  
Efficiency: N/A  
Efficacy: 91.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

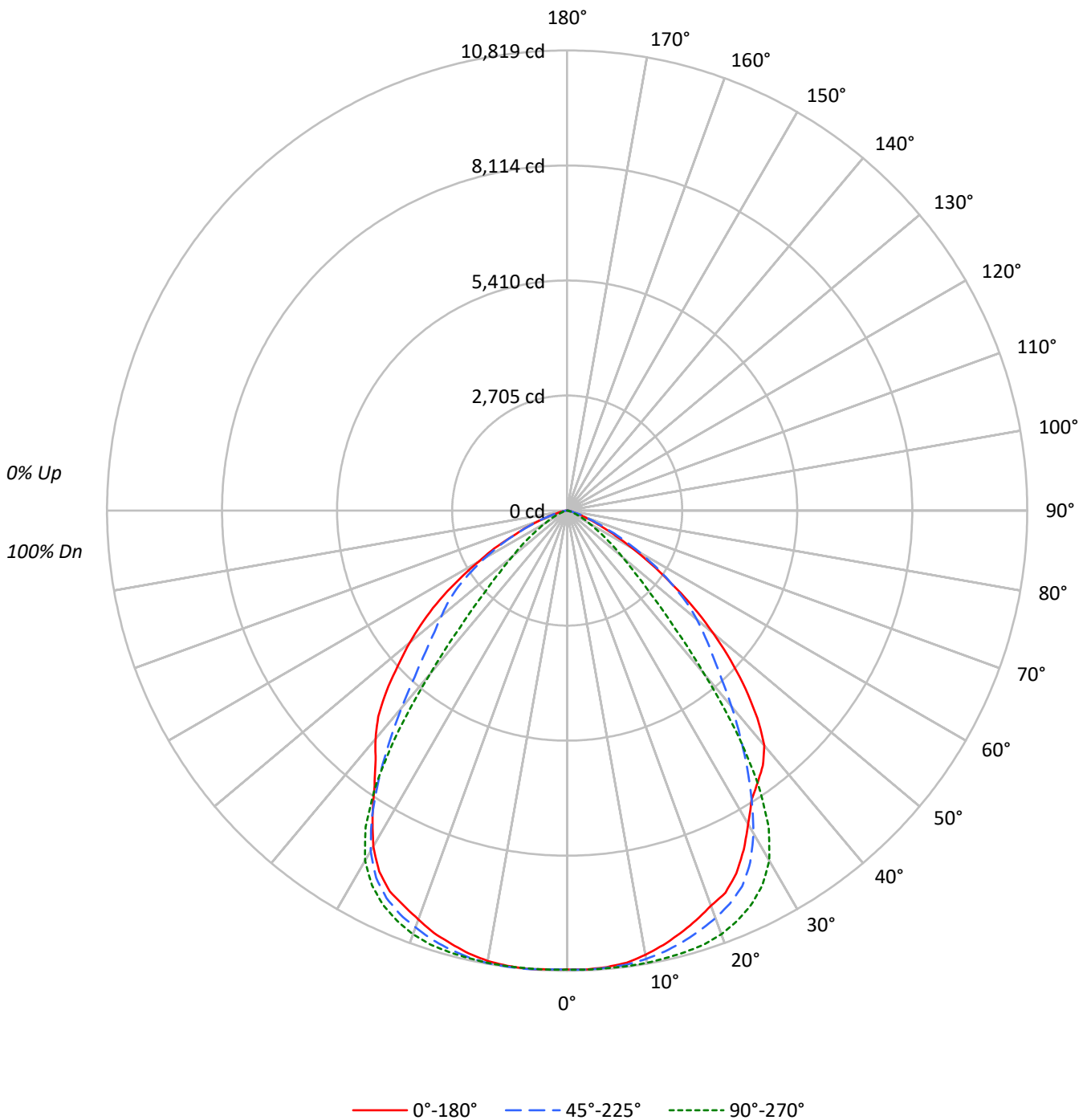
Input Watts (W): 223.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	332736	332736	332736
5°	333465	334366	334725
10°	332064	338051	336598
15°	328384	342993	336522
20°	324442	347816	335655
25°	320228	348216	335998
30°	302956	338424	324609
35°	293911	294125	297182
40°	290271	202369	282112
45°	258641	121491	262178
50°	215062	80858	231733
55°	161295	55740	196482
60°	109302	37145	148242
65°	65931	24093	101844
70°	36560	13055	62661
75°	16561	5516	32431
80°	14402	6162	22624
85°	16381	8173	22573



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1029.8	5.0
10°-20°	2990.6	14.6
20°-30°	4539.2	22.2
30°-40°	4767.6	23.3
40°-50°	3574.4	17.5
50°-60°	2293.4	11.2
60°-70°	981.1	4.8
70°-80°	231.8	1.1
80°-90°	43.1	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	8559.7	41.9
0°-40°	13327.2	65.2
0°-60°	19195.0	93.9
0°-90°	20451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20451.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	10790	10790	10790	10790	10790	
5°	10773	10790	10802	10819	10814	###
15°	10286	10501	10744	10675	10541	2901
25°	9412	9742	10234	10049	9875	4300
35°	7808	7373	7813	7721	7894	4900
45°	5931	4848	2786	4709	6012	4542
55°	3000	3000	1037	3128	3655	2721
65°	904	1066	330	1373	1396	965
75°	139	162	46	278	272	202
85°	46	29	23	46	64	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4
2.5°	10796.2	10807.8	10802.0	10802.0	10796.2	10802.0	10802.0	10813.6	10813.6	10802.0	10796.2
5°	10772.9	10784.5	10784.5	10772.9	10772.9	10802.0	10784.5	10796.2	10796.2	10790.4	10790.4
7.5°	10720.9	10720.9	10744.0	10726.7	10726.7	10744.0	10738.2	10749.8	10761.4	10767.2	10767.2
10°	10605.0	10616.6	10622.4	10622.4	10628.2	10645.5	10657.1	10680.4	10691.9	10703.5	10709.3
12.5°	10460.3	10477.6	10483.4	10477.6	10495.0	10518.1	10547.2	10576.1	10593.5	10616.6	10634.0
15°	10286.4	10286.4	10298.0	10315.4	10327.1	10361.8	10390.7	10425.4	10471.8	10500.8	10529.7
17.5°	10095.4	10107.0	10124.3	10124.3	10147.5	10205.3	10222.8	10274.9	10327.1	10356.0	10413.9
20°	9886.9	9898.4	9915.8	9927.4	9956.3	10002.7	10037.4	10083.7	10141.7	10193.9	10251.7
22.5°	9724.6	9701.5	9713.0	9724.6	9753.7	9794.2	9834.7	9892.6	9950.5	10002.7	10060.6
25°	9411.8	9417.7	9435.1	9446.6	9481.4	9516.2	9562.5	9631.9	9684.1	9742.1	9805.7
27.5°	8989.1	8994.9	9023.8	9023.8	9052.7	9110.7	9139.6	9197.6	9267.1	9325.0	9400.4
30°	8508.4	8519.9	8519.9	8543.1	8560.4	8589.5	8618.4	8676.3	8711.0	8763.2	8867.5
32.5°	8068.2	8079.7	8073.9	8068.2	8050.8	8045.0	8039.2	8050.8	8062.4	8079.7	8120.2
35°	7807.6	7778.5	7755.4	7714.9	7668.6	7610.6	7558.4	7489.0	7425.2	7373.1	7315.3
37.5°	7558.4	7552.6	7517.9	7460.0	7367.3	7263.1	7141.5	6990.9	6840.2	6678.1	6521.8
40°	7211.0	7193.5	7164.6	7083.5	6979.2	6851.8	6689.7	6504.3	6261.0	6012.0	5757.2
42.5°	6620.1	6625.9	6591.2	6527.4	6429.1	6307.4	6139.4	5936.8	5676.1	5380.7	5050.6
45°	5930.9	5930.9	5919.3	5867.2	5797.7	5699.2	5571.8	5403.9	5149.1	4847.8	4494.5
47.5°	5212.7	5218.5	5201.1	5189.6	5160.6	5096.9	5004.2	4876.8	4697.3	4407.6	4054.3
50°	4483.0	4483.0	4511.9	4506.1	4506.1	4483.0	4442.5	4367.1	4210.8	3979.0	3649.0
52.5°	3753.1	3764.8	3782.2	3805.3	3834.2	3880.6	3834.2	3799.5	3701.0	3521.4	3237.7
55°	3000.2	3011.8	3040.7	3081.3	3116.1	3162.5	3173.9	3173.9	3121.8	3000.2	2785.9
57.5°	2357.4	2339.9	2363.2	2397.9	2444.2	2490.6	2525.3	2565.8	2560.0	2479.0	2305.2
60°	1772.3	1778.1	1795.4	1830.3	1865.0	1905.6	1951.9	1986.6	2004.0	1963.5	1853.4
62.5°	1291.6	1291.6	1314.7	1349.5	1366.9	1424.8	1453.8	1471.2	1488.5	1482.7	1413.2
65°	903.6	915.1	926.7	944.1	961.4	996.1	1013.6	1048.3	1059.9	1065.7	1013.6
67.5°	637.2	619.7	631.4	642.8	660.3	683.5	718.2	718.2	735.5	735.5	700.8
70°	405.5	405.5	411.3	428.6	440.2	446.0	457.6	469.1	486.5	480.7	480.7
72.5°	272.2	266.4	272.2	278.1	283.9	301.2	301.2	307.0	318.6	324.4	301.2
75°	139.0	144.8	156.3	150.6	167.9	156.3	162.1	179.6	173.7	162.1	162.1
77.5°	115.8	115.8	115.8	110.1	121.6	121.6	115.8	127.4	121.6	121.6	115.8
80°	81.1	86.9	81.1	75.3	81.1	75.3	75.3	75.3	75.3	75.3	69.4
82.5°	63.8	52.2	58.0	52.2	58.0	58.0	52.2	46.3	46.3	52.2	46.3
85°	46.3	34.7	40.5	40.5	34.7	34.7	34.7	34.7	34.7	28.9	28.9
87.5°	28.9	17.4	17.4	17.4	23.1	23.1	23.1	17.4	23.1	23.1	11.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4
2.5°	10807.8	10802.0	10813.6	10807.8	10807.8	10802.0	10807.8	10802.0	10813.6	10790.4	10796.2
5°	10807.8	10796.2	10802.0	10807.8	10813.6	10802.0	10802.0	10802.0	10813.6	10802.0	10807.8
7.5°	10784.5	10778.7	10796.2	10807.8	10802.0	10796.2	10807.8	10802.0	10813.6	10807.8	10819.3
10°	10738.2	10744.0	10755.6	10772.9	10778.7	10784.5	10796.2	10796.2	10813.6	10790.4	10802.0
12.5°	10668.8	10691.9	10720.9	10732.4	10755.6	10755.6	10767.2	10772.9	10784.5	10778.7	10796.2
15°	10581.9	10610.8	10645.5	10674.6	10703.5	10720.9	10738.2	10744.0	10761.4	10744.0	10749.8
17.5°	10477.6	10512.3	10564.5	10599.2	10645.5	10662.9	10686.0	10697.7	10715.1	10703.5	10709.3
20°	10332.7	10373.4	10431.2	10483.4	10512.3	10552.8	10581.9	10599.2	10610.8	10599.2	10605.0
22.5°	10130.1	10188.0	10263.3	10303.8	10361.8	10396.5	10402.3	10442.9	10471.8	10442.9	10454.5
25°	9892.6	9950.5	10008.5	10095.4	10147.5	10188.0	10228.6	10234.4	10263.3	10257.5	10251.7
27.5°	9498.7	9574.1	9672.5	9742.1	9811.5	9875.3	9921.6	9933.1	9962.1	9950.5	9956.3
30°	8960.1	9041.3	9133.9	9243.9	9342.4	9406.0	9464.0	9504.5	9533.4	9516.2	9510.3
32.5°	8195.6	8276.7	8375.2	8485.1	8601.1	8693.6	8763.2	8815.4	8850.1	8838.5	8809.5
35°	7321.1	7344.2	7407.9	7494.8	7593.2	7691.7	7755.4	7813.3	7853.8	7865.4	7865.4
37.5°	6423.3	6348.0	6301.7	6301.7	6359.5	6400.0	6458.0	6492.7	6556.5	6579.6	6597.0
40°	5554.4	5380.7	5218.5	5096.9	5015.9	5010.1	5010.1	5027.3	5085.3	5160.6	5230.1
42.5°	4778.3	4500.3	4251.3	4025.4	3863.3	3770.6	3730.0	3735.9	3782.2	3851.6	3967.4
45°	4158.6	3811.1	3498.3	3226.1	3006.0	2861.2	2791.7	2785.9	2820.6	2901.7	3029.2
47.5°	3677.9	3307.2	2953.9	2641.1	2403.7	2247.2	2166.2	2143.1	2166.2	2241.4	2392.1
50°	3278.2	2896.0	2531.1	2206.7	1951.9	1789.8	1714.4	1685.5	1714.4	1778.1	1928.7
52.5°	2907.5	2513.7	2172.0	1859.2	1587.0	1447.9	1366.9	1349.5	1366.9	1442.1	1563.9
55°	2479.0	2143.1	1807.1	1494.3	1256.9	1117.9	1054.1	1036.8	1054.1	1123.7	1251.1
57.5°	2056.2	1766.5	1471.2	1187.3	984.7	862.9	805.1	781.9	822.4	868.7	1019.4
60°	1662.2	1430.7	1181.5	932.5	764.6	654.5	608.1	602.3	613.9	671.9	776.1
62.5°	1303.2	1112.1	915.1	712.4	573.4	527.1	469.1	463.4	474.9	509.6	590.8
65°	938.3	816.7	666.1	521.2	411.3	347.5	324.4	330.2	341.7	364.9	440.2
67.5°	654.5	567.6	463.4	364.9	283.9	254.8	231.7	225.9	231.7	272.2	312.8
70°	440.2	388.0	312.8	278.1	197.0	156.3	162.1	144.8	167.9	167.9	202.7
72.5°	289.5	254.8	208.5	162.1	139.0	110.1	110.1	104.3	115.8	121.6	150.6
75°	150.6	115.8	115.8	81.1	58.0	28.9	52.2	46.3	40.5	46.3	58.0
77.5°	104.3	86.9	81.1	63.8	58.0	46.3	46.3	46.3	46.3	52.2	58.0
80°	63.8	63.8	46.3	40.5	34.7	28.9	34.7	34.7	34.7	34.7	40.5
82.5°	40.5	34.7	34.7	28.9	28.9	23.1	23.1	23.1	23.1	23.1	34.7
85°	34.7	23.1	23.1	17.4	23.1	40.5	17.4	23.1	23.1	23.1	17.4
87.5°	11.6	17.4	17.4	17.4	11.6	5.8	11.6	17.4	17.4	28.9	23.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4	10790.4
2.5°	10807.8	10813.6	10813.6	10807.8	10807.8	10796.2	10819.3	10802.0	10807.8	10830.9	10813.6
5°	10819.3	10825.1	10825.1	10819.3	10819.3	10819.3	10825.1	10825.1	10819.3	10813.6	10825.1
7.5°	10842.5	10836.7	10836.7	10825.1	10825.1	10813.6	10825.1	10807.8	10819.3	10807.8	10825.1
10°	10813.6	10819.3	10813.6	10807.8	10807.8	10802.0	10802.0	10784.5	10790.4	10772.9	10784.5
12.5°	10796.2	10790.4	10790.4	10778.7	10767.2	10755.6	10749.8	10732.4	10732.4	10691.9	10709.3
15°	10749.8	10755.6	10738.2	10715.1	10703.5	10674.6	10662.9	10639.7	10616.6	10587.7	10593.5
17.5°	10709.3	10691.9	10668.8	10645.5	10599.2	10576.1	10552.8	10518.1	10506.5	10471.8	10460.3
20°	10587.7	10576.1	10547.2	10506.5	10477.6	10425.4	10402.3	10367.6	10338.6	10303.8	10286.4
22.5°	10431.2	10419.6	10384.9	10344.4	10298.0	10274.9	10251.7	10188.0	10159.0	10124.3	10118.5
25°	10234.4	10217.0	10182.2	10135.9	10112.7	10049.0	10025.8	9979.4	9968.0	9933.1	9927.4
27.5°	9933.1	9910.0	9869.5	9811.5	9771.0	9730.4	9707.3	9672.5	9661.0	9626.1	9620.5
30°	9481.4	9452.4	9371.3	9348.2	9278.6	9238.1	9238.1	9191.8	9197.6	9174.5	9174.5
32.5°	8769.0	8722.7	8658.9	8612.6	8566.2	8543.1	8543.1	8525.7	8537.3	8537.3	8548.9
35°	7824.9	7761.2	7726.4	7697.5	7697.5	7720.6	7790.2	7807.6	7842.3	7871.2	7894.5
37.5°	6614.3	6608.6	6649.2	6683.9	6770.8	6869.3	6990.9	7095.2	7193.5	7263.1	7332.5
40°	5305.4	5450.2	5566.0	5728.3	5861.4	6052.5	6272.6	6452.2	6620.1	6741.9	6869.3
42.5°	4141.2	4326.5	4569.9	4807.3	5044.8	5305.4	5595.1	5844.1	6064.2	6232.1	6365.3
45°	3226.1	3480.9	3776.4	4077.5	4384.5	4708.9	5010.1	5264.9	5496.6	5670.3	5803.5
47.5°	2600.5	2878.6	3214.5	3544.7	3892.2	4233.9	4569.9	4790.0	4981.0	5120.0	5241.8
50°	2148.7	2444.2	2797.5	3173.9	3521.4	3863.3	4152.8	4367.1	4523.5	4645.1	4720.4
52.5°	1795.4	2108.2	2484.8	2861.2	3208.7	3521.4	3782.2	3944.3	4071.7	4158.6	4228.1
55°	1482.7	1784.0	2137.3	2490.6	2832.3	3127.6	3341.9	3463.6	3562.0	3614.1	3654.7
57.5°	1210.6	1488.5	1812.9	2137.3	2432.6	2675.9	2843.9	2965.5	3011.8	3052.3	3046.5
60°	949.9	1210.6	1505.9	1784.0	2038.8	2235.6	2357.4	2426.8	2461.5	2479.0	2467.3
62.5°	747.1	984.7	1210.6	1453.8	1639.1	1807.1	1923.0	1923.0	1940.3	1946.1	1963.5
65°	556.0	735.5	932.5	1112.1	1262.6	1372.7	1436.5	1453.8	1477.0	1471.2	1459.6
67.5°	411.3	544.5	689.2	822.4	926.7	996.1	1042.5	1083.2	1077.3	1065.7	1059.9
70°	283.9	370.7	498.1	579.2	654.5	724.0	735.5	741.3	747.1	753.0	741.3
72.5°	197.0	260.6	330.2	399.6	446.0	474.9	504.0	509.6	509.6	509.6	504.0
75°	98.5	133.2	197.0	225.9	266.4	278.1	301.2	301.2	318.6	295.3	289.5
77.5°	86.9	104.3	139.0	162.1	179.6	197.0	202.7	220.1	214.3	202.7	208.5
80°	52.2	63.8	86.9	98.5	121.6	127.4	133.2	139.0	133.2	139.0	139.0
82.5°	40.5	46.3	58.0	58.0	75.3	75.3	81.1	81.1	86.9	86.9	86.9
85°	23.1	40.5	34.7	69.4	46.3	46.3	58.0	69.4	58.0	58.0	69.4
87.5°	23.1	23.1	17.4	23.1	23.1	23.1	28.9	34.7	34.7	40.5	34.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P249198

CATALOG NUMBER: LD8B200D010 ER8B200827 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	10790.4	10790.4	10790.4	10790.4
2.5°	10807.8	10819.3	10802.0	10796.2
5°	10825.1	10825.1	10813.6	10813.6
7.5°	10825.1	10825.1	10807.8	10796.2
10°	10778.7	10778.7	10761.4	10749.8
12.5°	10691.9	10691.9	10686.0	10668.8
15°	10581.9	10581.9	10558.6	10541.3
17.5°	10431.2	10442.9	10413.9	10413.9
20°	10269.1	10263.3	10240.2	10228.6
22.5°	10101.2	10089.5	10083.7	10049.0
25°	9921.6	9910.0	9892.6	9875.3
27.5°	9614.6	9608.8	9591.4	9568.3
30°	9145.4	9139.6	9116.5	9116.5
32.5°	8537.3	8531.5	8508.4	8514.2
35°	7905.9	7929.2	7917.6	7894.5
37.5°	7378.9	7396.3	7407.9	7396.3
40°	6938.7	6990.9	6996.7	7008.3
42.5°	6469.6	6539.1	6562.3	6573.8
45°	5907.7	5971.5	6023.6	6012.0
47.5°	5334.3	5380.7	5427.0	5392.3
50°	4784.2	4813.1	4830.5	4830.5
52.5°	4262.9	4262.9	4257.1	4262.9
55°	3666.3	3666.3	3643.2	3654.7
57.5°	3040.7	3052.3	3034.9	3006.0
60°	2461.5	2432.6	2421.0	2403.7
62.5°	1917.2	1917.2	1876.6	1928.7
65°	1436.5	1419.0	1401.6	1395.8
67.5°	1042.5	1036.8	1019.4	1013.6
70°	735.5	712.4	706.6	695.0
72.5°	492.3	492.3	480.7	480.7
75°	301.2	272.2	266.4	272.2
77.5°	208.5	202.7	202.7	197.0
80°	139.0	133.2	144.8	127.4
82.5°	86.9	92.7	86.9	92.7
85°	58.0	69.4	63.8	63.8
87.5°	34.7	34.7	34.7	34.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)